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=> s angioge?(1)piperidin?
        61790 ANGIOGE?
        107479 PIPERIDIN?
          158 ANGIOGE? (L) PIPERIDIN?
=> s l1 and us/pc
       2008892 US/PC
L2
           97 L1 AND US/PC
=> s 12 and benzov?
        135568 BENZOY?
L3
           26 L2 AND BENZOY?
=> d bib abs 1-26
   ANSWER 1 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
    2009:679387 CAPLUS
AN
DN
    150:563659
ΤI
    Preparation of 2-(2,6-dioxo-3-piperidinyl)-1-oxo- and
     1,3-dioxoisoindolines as TNFa inhibitors
IN
    Muller, George W.; Chen, Roger Shen-Chu; Ruchelman, Alexander L.
PA
    USA
SO
    U.S. Pat. Appl. Publ., 117pp., Cont.-in-part of U.S. Ser. No. 897,339.
    CODEN: USXXCO
    Patent
T.A
    English
FAN.CNT 2
    PATENT NO.
                       KIND DATE
                                         APPLICATION NO.
                                                               DATE
PRAI US 2007-925513P PUS 2007-937782P
                             20090604
                                        US 2008-130445
                                                              20080530 <--
                             20070420
                             20070628
                     A2 20070831
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

US 2007-897339

OS MARPAT 150:563659

GI

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AB Title compds. I [X = CH2 or C(0); Y = 0 or S; R10 = alkyl, alkoxy, (un)substituted alkyl-(5 to 10-membered heteroaryl or heterocycle), alkyl-(5- to 10-membered aryl), or alkyl-CO-O-R12, wherein R12 = H or alkyl; R11 = H or alkyl], and their pharmaceutically acceptable salts, solvates, stereoisomers, or prodruge, are prepared and disclosed for preventing or treating diseases or conditions related to an abnormally high level or activity of TNFα. Thus, e.g., II was prepared by condensation reaction of 3-(5-aminomethyl-1-oxo-1,3-dihydroisoindol-2-yl) piperidine-2,6-dione hydrochloride with 4-chlorophenylacetyl chloride. II exhibited IC50 value of in the range of 0.002 to 15 μM in TNFα inhibition assay in PMBC. As TNFα inhibitors, I and pharmaceutical compns. comprising them are useful for treating or preventing diseases, e.g. cancer, angiogenesis, pain, macular degeneration, etc.

II

- L3 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2008:770464 CAPLUS
- DN 149:104603
- TI Preparation of piperidine and pyrrolidine derivatives as cytoskeletal active Rho kinase inhibitor compounds
- IN Lampe, John W.; Watson, Paul S.; Slade, David J.; Peterson, Ward M.; Crean, Christopher S.; Vittitow, Jason L.; DeCamp, Jonathan Bryan; Pelz, Nicholas F.
- PA Inspire Pharmaceuticals, Inc., USA
- SO PCT Int. Appl., 143 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

	PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
PI	WO 200	080770	57		A2	-	2008	0626		WO 2	007~	US87	 973		2	0071	218
	WO 200	80770	57		A3		2008	0821									
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KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
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     US 20080214614
                          A1
                                20080904
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                                                                    20071217 <--
     AU 2007333715
                          A1
                                20080626
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     KR 2009091767
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                                20090828
                                            KR 2009-712595
                                                                    20071218
     EP 2099457
                          A2
                                20090916
                                            EP 2007-869450
                                                                    20071218
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             IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR
                                20091118
                                            CN 2007-80049608
     CN 101583361
                          Α
PRAI US 2006-870555P
                          P
                                20061218
     US 2007-958214
                                20071217
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     WO 2007-US87973
                                20071218
                          Tall
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
    MARPAT 149:104603
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OS

GI

AB The invention is directed to synthetic cytoskeletal active compds. that are inhibitors of Rho-associated protein kinase and to pharmaceutical compns. comprising such compds. and a pharmaceutically acceptable carrier. The invention is addnl. directed to a method of preventing or treating diseases or conditions associated with cytoskeletal reorganization. The method treats increased intraocular pressure, such as primary open-angle glaucoma. The method comprises a therapeutically effective amount of a cytoskeletal active compound of formula I, wherein said amount is effective to influence the actomyosin interactions, for example by leading to cellular relaxation and alterations in cell-substratum adhesions. Compds. of formula I [Q = CO, SO2 or (CR4R5)n; m = 1-3; p = 1-2; n = 0-3; R2 = 1-2; n = 0-3; R3 = 1-2; n = 0-3;(un) substituted indazolyl, isoquinolinyl, pyridinyl, etc.; Ar = monocyclic or bicyclic arvl or heteroarvl; X = Y-Z; Y = OR8, NR8R9, SR8, SOR8, etc.; Z = absent; R3, R4 and R5 independently = H, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, etc.; R8 and R9 independently = H, (un) substituted alkyl, alkenyl, alkynyl, aryl, etc.], and their pharmaceutically acceptable salts, are prepared and disclosed. Thus, e.g., II was prepared by reductive amination of 4-(methylthio)benzaldehyde with 2,2-dimethy1-1-[5-[(piperidin-3-y1)amino]-1H-indazo1-1-y1]propan-1-one (preparation given) followed by BOC-deprotection. I were evaluated for their ROCK2 inhibitory activity in Rho kinase inhibition assay. From the assay,

I demonstrated the ability to inhibit ROCK2 in vitro with IC50 value of < 10 µM, e.g., II showed IC50 of 65.8 nM.

- ANSWER 3 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN L3
- 2008:410448 CAPLUS AN
- DN 148:403237
- Preparation of (oxoquinazolinyl)piperidinedione derivatives for use as therapeutic agents
- IN Muller, George W.; Man, Hon-Wah
- PA Celgene Corporation, USA
- SO PCT Int. Appl., 89 pp.
- CODEN: PIXXD2 DT
- Patent
- LA English FAN.CNT 1

I PAN . V		ENT :	NO.			KIN)	DATE			APPL	ICAT	ION I	NO.		D	ATE	
PI		2008							0403 0828		WO 2	007-	US20	765		2	0070	925
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									UZ,									
		RW:							DE,									
									MT,									
									GN,									
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	03	2663							TM,					721		2	0070	0.05
		2066															0070	
	EF								DE,									
		к.							MC,									
						MK,		21,	110,	111,	,	,	/	1107	UL,	01,	OI,	1117
	IIS	2008				A1		2008	0703		IIS 2	007-	9045	51		2	0070	926 <
		2009							0415			009-						
		2009										009-						
		1015							0916			007-					0090	
PRAI	US	2006	-847	471P		P		2006	0926									
	WO	2007	-US2	0765		W		2007	0925									

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS

CASREACT 148:403237; MARPAT 148:403237 GI

Title compds. I [R1 = H, halo, (CH2)nOH, (un)substituted alky1, etc.; R2 = H, (CH2) nOH, Ph, alkoxy, (un) substituted alkyl; R3 = H or (un) substituted alkyl; n = 0 to 2], and their pharmaceutically acceptable salts, are prepared and disclosed as therapeutic agents. Thus, e.g., II was prepared by

II

condensation of 2-amino-6-methylbenzoic acid with 3-aminopiperidine-2,6-dione hydrochloride followed by heterocyclization with tri-Me orthoformate. I were evaluated in $TNF\alpha$ inhibition assays (no data given). I were disclosed as therapeutic agents for cancer, disorders associated with angiogenesis, pain, macular degeneration or related syndromes, skin disease, pulmonary disorder, asbestos-related disorder, parasitic disease, etc.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L3 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:944197 CAPLUS

DN 147:292190

ΤI Synthesis of benzo[c]chromen-6-one derivatives and analogs for treatment of diseases characterized by cellular proliferation and angiogenesis TN

Sherris, David I.

PA Paloma Pharmaceuticals, Inc., USA

U.S. Pat. Appl. Publ., 33pp., Cont.-in-part of U.S. Ser. No. 412,618. SO CODEN: USXXCO

DT Patent

LA English

FAN. CNT 2

E Pilv.	ONI Z				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070197567	A1	20070823	US 2007-680292	20070228 <
	US 20060257337	A1	20061116	US 2006-412618	20060427 <
	IN 2008DN07981	A	20090612	IN 2008-DN7981	20080923
	NO 2008004077	A	20081128	NO 2008-4077	20080924
PRAI	US 2005-675707P	P	20050428		
	US 2006-777318P	P	20060228		
	US 2006-412618	A2	20060427		
	WO 2007-US62971	W	20070228		
OS	MARPAT 147:292190				

AB Described herein are compns. and methods for preventing and/or treating diseases involving aberrant angiogenesis employing one or more benzo[c]chromen-6-one derivs. and analogs. These compds. showed antitumor and anti-angiogenic activities. The preparation of these compds. is given.

- ANSWER 5 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2007:873163 CAPLUS

DN 147:257752

- Preparation of heterocyclic compounds as integrin inhibitors for disease treatment and diagnosis
- Zischinsky, Gunther; Stragies, Roland; Osterkamp, Frank; Scharn, Dirk; Hummel, Gerd; Kalkhof, Holger; Zahn, Grit; Vossmeyer, Doerte; Christner-Albrecht, Claudia; Reineke, Ulrich
- Jerini A.-G., Germany PA
- PCT Int. Appl., 224pp. SO

CODEN: PIXXD2

DT Patent

LA English FAN.CNT 1

	PA:	FENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D.	ATE	
							-											
PI	WO	2007	0880	41		A1		2007	0809		WO 2	007-1	EP83	2		2	0070	131
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
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			MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
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TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

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             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     AU 2007211620
                                 20070809
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                          A1
                                                                     20070131
     CA 2635403
                          A1
                                 20070809
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                                                                     20070131
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     JP 2009525296
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                                 20090709
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     KR 2008095854
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                          Α
                                                                     20080729
                                20090304
                                             CN 2007-80004060
     CN 101379056
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     US 20090104116
                          A1
                                 20090423
                                             US 2008-162798
                                                                     20080731 <--
PRAI EP 2006-2005
                          Α
                                 20060131
     WO 2007-EP832
                          Ta7
                                 20070131
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
os
   MARPAT 147:257752
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Me Me Me Me Me Me O OH O OH

GI

OSC.G 1

RE.CNT 6

AB The present invention is related to a compound of formula G-Z-A-Ar-Y-W (I), wherein A is a nonarom. heterocyclic ring.; Ar is either absent or phenylene; G is a radical containing one or more moieties selected from the group consisting of NH, OH and a basic moiety; Z and Y are alkyl chains containing O, S, N, etc.; Y is a radical of general formula C(R1)-C(R4)(COR3)-Q-R2 (wherein R1 is H alkyl, cycloalkyl, etc., R2 is a hydrophobic moiety; R3 is OH C1-C8 alkyloxy, and aryl C0-C6 alkyloxy; R4 is H, halo, or C1-C4 alkyl; Q is CO, CS, etc.). The compds. are inhibitors of integrins, especially antagonists of the fibronectin receptor α5β1, useful as anti- angiogenic agents. Preparation of I is exemplified. For example, II was prepared in a multistep synthesis involving the key step of reacting 3-(4-boronophenyl)-2-(2,4,6-trimethylbenzoylamino)propionic acid and (4-methylpyridin-2-yl)piperidin-4-ylmethylcarbamic acid tert-Bu ester. In an α5β1-fibronectin binding assay, II had an IC50 of < 100 nM. I can comprise a further moiety, preferably a moiety which is selected from the group comprising a targeted moiety, a delivery moiety, and a detection moiety.

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- T. 3 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- 2007:538388 CAPLUS AN
- 146:521787 DN
- TΙ Thiazoles as inhibitors targeting resistant and kinase mutations and their preparation and use in the treatment of angiogenic-associated or hematological disorders
- Cao, Jianguo; Hood, John; Lohse, Dan; Mak, Chi Ching; Mc Pherson, Andrew; IN Noronha, Glenn; Pathak, Ved; Renick, Joel; Soll, Richard M.; Zeng, Bingi; Chow, Chun; Palanki, Moorthy; Dneprovskaia, Elena
- PA Targegen, Inc., USA
- SO PCT Int. Appl., 93 pp. CODEN: PIXXD2
- DТ Patent
- LA English

EAN CHT 2

PAN.	PA:	ENT :				KIN	D	DATE			APPL	ICAT	ION I			D.	ATE	
PI	WO	2007	0560	23							WO 2	006-				2	0061	031
	WO	2007						2007										
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			GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
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	US	2007	0161	645		A1		2007	0712		US 2	006-	5912	52		2	0061	031 <
PRAT		2005												_		_		
		ENT H								LE I	N LS	US D	ISPL	AY F	ORMA	Г		

os MARPAT 146:521787 GI

A compound is provided, having the general structure I. Compds. of formula AB I wherein L is substituted (hetero)aryl; A is (un)substituted

II

(hetero)aryl; Y is CH2CH2 and CH=CH; are claimed. The compound I can be used for treatment of various angiogenic-associated or hematol. disorders, such as myeloproliferative disorders in patients who do not respond to kinase-inhibition therapy that comprises administering currently used medications. Example compound II was prepared by coupling of 5-((E)-4-methoxystyryl)thiazol-2-amine with tert-Bu 4-(4-bromophenylsulfonyl)piperidine-1-carboxylate. All the

invention compds. were evaluated for their kinase activity (data given). OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

- L3 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2006:1204278 CAPLUS
- DN 145:511652
- TI Compositions of benzo(c)chromen-6-ones for treatment of skin diseases characterized by cellular proliferation and angiogenesis
- TN Sherris, David
- PA Paloma Pharmaceuticals, Inc., USA
- SO U.S. Pat. Appl. Publ., 26 pp.
- CODEN: USXXCO DT Patent
- LA English
- FAN CNT

FAN.		2 TENT NO.			KIN		DATE			APPL						ATE		
PI	CA	20060257 2651244 20071332	49		A1 A1 A3		2006 2007 2009	1116 1122 0219		US 2 CA 2 WO 2	006- 006- 006-	4126 2651 US40	18 244 242		2	0061	012	:
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	US AU CA	20095353 20070197 20072199 2643579 20071012	31 567 81 47		T A1 A1 A1 A2		2009 2007 2007 2007 2007	1001 0823 0907 0907 0907		JP 2 US 2 AU 2 CA 2 WO 2	009- 007- 007- 007-	6802 2199 2643	92 81 579		2 2	0061 0070 0070 0070 0070	228 < 228 228	:
	WO	CN, GE, KP, MN, RS,	AG, CO, GH, KR, MW, RU,	CR, GM, KZ, MX, SC,	AM, CU, GT, LA, MY, SD,	AT, CZ, HN, LC, MZ, SE,	2007 AU, DE, HR, LK, NA, SG, VC,	AZ, DK, HU, LR, NG, SK,	DM, ID, LS, NI, SL,	DZ, IL, LT, NO, SM,	EC, IN, LU, NZ, SV,	EE, IS, LV, OM,	EG, JP, LY, PG,	ES, KE, MA, PH,	FI, KG, MD, PL,	GB, KM, MG, PT,	GD, KN, MK, RO,	
		RW: AT, IS, CF, GM,	BE, IT, CG, KE,	BG, LT, CI, LS,	CH, LU, CM, MW,	CY, LV, GA, MZ,		DE, NL, GQ, SD,	DK, PL, GW, SL,	EE, PT, ML, SZ,	ES, RO, MR, TZ,	SE, NE,	SI, SN,	SK, TD,	TR, TG,	BF, BW,	BJ, GH,	
	EP	1996021 R: AT,	BE,	BG,	A2 CH,	CY,	2008 CZ, LV,	1203 DE,	DK,	EP 2	007- ES,	FI,	FR,		GR,			
	JP	20095283					2009										228	

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MX 2008011013 A 20081023 MX 2008-11013 20080827
CN 101431893 A 20090513 CN 2007-80014874 20081024
NO 2008004974 A 20090127 NO 2008-4974 20081024
CN 101484125 A 20090175 CN 2006-80055090 20081224
PRAI US 2005-675707P P 20050428
US 2006-777318P P 20060427
US 2006-112618 A 20060427
WO 2006-US40242 W 20061012
WO 2007-US62971 W 20070228
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Preparation and compns. of benzo(c)chromen-6-ones and methods for preventing and/or treating skin diseases associated with cellular proliferation and/or angiogenesis are provided. Skin diseases that are the object of the present invention include, but are not limited to psoriasis and acopic dermatitis, as well as skin aging providing anti-aging benefits which results in reduced appearance of wrinkles and aged skin, improved skin color, treatment of photodamaged skin, improvement in skin's radiance and clarity and finish, and an overall healthy and youthful appearance of the skin, involving aberrant angiogenesis and hyperplasia. Thus, an antiangiogenic activity of SG00929 (preparation given) was evaluated in vitro my measuring an inhibition of proliferation of endothelial cells using HUVEC cells and lack of binding to human estrogen receptors (hER) α and β . At concns. of 3 mM and 0.3 mM, SG00529 inhibited proliferation of endothelial cells using

bind to hERα and hERβ.

- L3 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:1292167 CAPLUS COPYRIGHT 2009 AV
- DN 144:36369
- TI Preparation of quinone substituted quinazoline and quinoline kinase
 - inhibitors for treatment of angiogenesis-related diseases
- IN Floyd, Middleton B., Jr.; Nittoli, Thomas; Wissner, Allan; Dushin, Russell George, Nilakantan, Ramaswamy; Ingalls, Charles; Fraser, Heidi Leigh; Johnson, Bernard Dean
- PA Wyeth, USA
- SO PCT Int. Appl., 195 pp.
- CODEN: PIXXD2 DT Patent
- LA English
- LA Englist
- FAN.CNT 1

	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
PI	2005				A2 A3		2005			WO 2	005-	US16	800		2	0050	511
	W:	CN, GE, LC, NG, SL,	CO, GH, LK, NI, SM,	CR, GM, LR, NO, SY,	CU, HR, LS, NZ,	CZ, HU, LT, OM,	AU, DE, ID, LU, PG, TN,	DK, IL, LV, PH,	DM, IN, MA, PL,	DZ, IS, MD, PT,	EC, JP, MG, RO,	EE, KE, MK, RU,	EG, KG, MN, SC,	ES, KM, MW, SD,	FI, KP, MX, SE,	GB, KR, MZ, SG,	GD, KZ, NA, SK,
	RW:	BW, AZ, EE, RO,	BY, ES, SE,	GM, KG, FI, SI,	KZ, FR,	MD, GB, TR,	MW, RU, GR, BF,	TJ, HU,	TM, IE,	AT, IS,	BE, IT,	BG, LT,	CH, LU,	CY, MC,	CZ, NL,	DE, PL,	DK, PT,
	2004						2005			AU 2	004-	3056	12		2	0040	812
	2004									WO 2	004-	EP90	02		2	0040	812
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,

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             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
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             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE,
             SN, TD, TG
     EP 1658660
                                 20071010
                                             EP 2004-764006
                                                                     20040812
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, HR, LT, LV, MK
     AT 375610
                          Т
                                 20071015
                                             AT 2004-764006
                                                                     20040812
     ES 2293320
                          Т3
                                 20080316
                                             ES 2004-764006
                                                                     20040812
     NZ 545051
                          A
                                 20080630
                                             NZ 2004-545051
                                                                     20040812
     TW 239125
                                             TW 2004-93125666
                          B
                                 20050901
                                                                     20040826
     US 20060286824
                          A1
                                 20061221
                                             US 2006-569306
                                                                     20060221 <--
     US 7407389
                          B2
                                 20080805
     ZA 2006001687
                          A
                                 20070425
                                             ZA 2006-1687
                                                                     20060227
PRAI US 2004-573251P
                                 20040520
     DE 2003-10339844
                          Α
                                 20030829
     WO 2004-EP9002
                          W
                                 20040812
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS CASREACT 144:36369; MARPAT 144:36369

MeO

G4

AB Title compds. I [Rl = N, C-CN, CH, C-F, C-Cl, C,Br, C-T; Gl-G4 = independently H, halo, alk(en/yn)yl, alkyleulfinyl, NH2 and derivs., etc., with the proviso that G3 or G4 are not -NH-R2; R2 = -CO-C.tplbond.C-R3, -CO-(R3)C:C(R3)2, etc.; R3 = independently H, alkyl, Ph, carboxy, etc.; X = NH, O, S, etc.; Z' = (un)substituted l,4-benzoquinone,

ΙI

1,4-naphthoquinone, 7-oxabicyclo[4.1.0]hept-3-ene-2,5-dione; and their

pharmaceutically acceptable salts] were prepared as protein kinases, particularly protein tyrosine kinases, inhibitors. I are useful for treatment of diseases that are characterized, at least in part, by excessive, abnormal, or inappropriate angiogenesis, such as cancer, diabetic retinopathy, macular degeneration and rheumatoid arthritis. I inhibit angiogenesis by inhibiting a tyrosine kinase receptor enzyme, specifically KDR, and binding to the KDR in an irreversible manner. For example, reacting 2-amino-4,5-dimethoxybenzonitrile with DMF di-Me acetal, refluxing of amidine with 4-chloro-2,5-dimethoxyaniline and oxidation of dimethoxy intermediate with ceric ammonium nitrate gave quinazoline II. (Quinazoline II (100 nM concentration) gave 83% inhibition of KDR kinases

activity.

Selected I were effective inhibitors of VEGF-dependent growth factor of HUVEC cells.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:977020 CAPLUS
- DN 143:286438
- TI Preparation of pyridine and pyrimidine derivatives as hepatocyte growth factor receptor inhibitors, angiogenesis inhibitors, and tumor inhibitors
- IN Matsushima, Tomohiro; Takahashi, Keiko; Funasaka, Setsuo; Obaishi, Hiroshi
- PA Eisai Co., Ltd., Japan SO PCT Int. Appl., 601 pp.
- CODEN: PIXXD2
- DT Patent
- LA Japanese FAN.CNT 2

FAN.		Z TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE		
PI	WO	RW:	AE, CN, GE, LK, NO, SY, BW, AZ, EE,	AG, CO, GH, LR, NZ, TJ, GH, BY, ES, SE,	AL, CR, GM, LS, OM, TM, GM, KG, FI, SI,	AM, CU, HR, LT, PG, TN, KE, KZ, FR, SK,	AT, CZ, HU, LU, PH, TR, MD, GB, TR,	2005 AU, DE, ID, LV, PL, TT, MW, RU, GR, BF,	AZ, DK, IL, MA, PT, TZ, MZ, TJ, HU,	BA, DM, IN, MD, RO, UA, NA, TM, IE,	BB, DZ, IS, MG, RU, UG, SD, AT, IS,	BG, EC, JP, MK, SC, US, SL, BE, IT,	BR, EE, KE, MN, SD, UZ, SZ, BG, LT,	BW, EG, KG, MW, SE, VC, TZ, CH, LU,	BY, ES, KP, MX, SG, VN, UG, CY, MC,	BZ, FI, KR, MZ, SK, YU, ZM, CZ, NL,	CA, GB, KZ, NA, SL, ZA, ZW, DE,	CH, GD, LC, NI, SM, ZM, AM, DK, PT,	ZW
	AU CA US US	2005 2005 2543 2005 7531 1719	2173 2173 859 0277 532 762 AT, IE,	25 25 652 BE, SI,	CH,	A1 B2 A1 A1 B2 A1 DE, LV,	DK,	2007 2005 2005 2009	1129 0909 1215 0512 1108 FR,	GB,	CA 2 US 2 EP 2 GR,	005- 005- 005- IT,	2543 6563 7199 LI,	859 1 73 LU,	NL,	2: 2: SE,	0050 0050 0050 MC,	225 225 225 PT,	<
	BR RU NZ US KR KR KR	1906 2005 2330 5475 2007 2006 7995 2006 2006	166 0072 021 17 0270 1139 34 0096	01 421 92 55		A A C2 A A1 A B1		2008 2009 2007 2006 2008	0610 0727 0430 1122 1103 0131 1030		BR 2 RU 2 NZ 2 US 2 KR 2	005- 006- 005- 006- 006-	7201 1342 5475 5770 7139	54 17 65 40		21 21 21 21	0050 0050 0050 0060 0060	225 225 225 424 711	<

	IN	2006CN03530	A	20070615	IN 2006-CN3530	20060926
PRA	AI JP	2004-54451	A	20040227		
	JP	2004-370801	A	20041222		
	WO	2005-JP3701	W	20050225		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT MARPAT 143:286438

AB The title compds. I [R1 = alkyl, alkenyl, alkynyl, etc.; R2, R3 = H; R4 -R7 = H, halo, cyano, alkyl, etc.; R8 = H, alkyl; R9 = alkyl, alkenyl, alkynyl, etc.; V1, V2 = O, S; W = NR; R = H, alkyl; X = CR10, N; R10 = H, halo, cyano, etc.; Y = O, S, sulfinyl, etc.] are prepared Thus, a solution of phenylacetylisothiocyanate in toluene was added to a mixture of 3-[4-(4-aminophenoxy)pyridin-2-v1]-1-methyl-1-(1-methylpiperidin-4-v1)urea and D-10-camphorsulfonic acid in ethanol; the resulting mixture was stirred for 1.5 h to give, after workup and purification, 1-methyl-1-(1-methylpiperidin-4-y1)-3-[4-[4-(3phenylacetylthioureido)phenoxy]pyridin-2-yl]urea. In a test for the inhibition of hepatocyte growth factor receptor (HGFR) tyrosine kinase, compds. of this invention in vitro showed IC50 values of 0.016 µM to 0.1 µM.

Ι

osc.g 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS) RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 1.3 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:729533 CAPLUS
- 143:199863 DN
- ΤI
- Pharmaceutical composition comprising a piperidine compound for promoting angiogenesis
- Hashimoto, Ayako; Imaizumi, Takashi; Miyakoda, Goro; Mori, Toyoki IN PA Otsuka Pharmaceutical Co., Ltd., Japan
- SO PCT Int. Appl., 23 pp.
- CODEN: PIXXD2
- Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005072734	A1	20050811	WO 2005-JP1444	20050126
	W: AE, AG, AL,	AM, AT	, AU, AZ, BA	, BB, BG, BR, BW, BY,	BZ, CA, CH,

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            GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML,
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                                20050811
                                           AU 2005-207746
     AU 2005207746
                         A1
                                                                   20050126
     AU 2005207746
                         B2
                               20070816
     CA 2553918
                         A1
                               20050811
                                           CA 2005-2553918
                                                                   20050126
     EP 1708705
                         A1
                               20061011
                                           EP 2005-704342
                                                                   20050126
     EP 1708705
                         В1
                               20090218
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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     CN 1905877
                         Α
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                                           CN 2005-80001651
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     CN 100473383
                         С
                               20090401
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                         A
                               20070410
                                           BR 2005-6578
                                           AT 2005-704342
     AT 422888
                         T
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                                                                   20050126
     RU 2354375
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                                           RU 2006-127474
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     JP 2005239711
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                                                                   20050131
                        A
                                          KR 2006-714350
     KR 2006127053
                              20061211
                                                                   20060718
     KR 868470
                        B1 20081112
     TN 2006KN02071
                        A
                              20070518
                                           IN 2006-KN2071
                                                                   20060724
                        A1 20090723
     US 20090187025
                                           US 2006-587045
                                                                   20060724 <--
     MX 2006008444
                         A
                              20061009
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                                                                   20060726
                             20090717
     HK 1095755
                         A1
                                           HK 2007-103158
                                                                   20070323
PRAI JP 2004-20859
                         A
                              20040129
     WO 2005-JP1444
                         W
                               20050126
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 143:199863 GI

$$R-N$$
 $N \subset \mathbb{R}^{1}$
 R^{2}

AB The present invention provides a pharmaceutical composition for promoting angiogenesis, which has an angiogenesis promoting action even in a vascular culturing system, without effect of microcirculation. A pharmaceutical composition comprises at least one piperidine compound (1; R = benzoyl, anino benzoyl; Alkanoyl amino benzoyl, alkyl anino benzoyl; R1 = H, alkyl; R2 = Ph alkyl) for promoting angiogenesis and prevention and therapy of diseases with insufficient development and regeneration of blood vessels, and various diseases caused by ischemia. For example, 4-[N-methyl-N-(2-phenylethyl)amino]-1-(3,5-dimethyl-4-propionylaminobenzoyl)piperidine (Test Compound A, 5 mg), starch (132 mg), magnesium stearate (18 mg) and lactose (45 mg) were mixed, and tableted by conventional means to produce tablets. The Test Compound A clearly demonstrated to have angiogenesis promoting action in vitro in aortic rings embedded into type I collagen gel.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.3 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:260032 CAPLUS

DN 142:336364

ΤI Preparation of thiazolidinedione and 3,4-dihydropyrazol-3-ones as plasminogen activator inhibitor-1 inhibitors

IN Muto, Susumu; Kubo, Asako; Itai, Akiko; Sotome, Tomomi; Yamaquchi, Yoichi

Institute of Medicinal Molecular Design. Inc., Japan PA

PCT Int. Appl., 438 pp.

CODEN: PIXXD2

Patent

DT LA Japanese

PAN.	CNT 1 PATENT	NO.			KIN	D	DATE			APPL					D.	ATE	
PI	WO 200	50261	27		A1	_	2005	0324							2	0040	903
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		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW	: BW,															
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
					BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			TD,														
	EP 166																
	R:	ΑT,															
																	SK, HR
										US 2	007-	5713	24		2	0070	220 <
PRAI	JP 200																
	WO 200																
ASSI	GNMENT	HISTO	RY F	OR U	S PA'	TENT	AVA	ILAB:	LE I	N LS	US D	ISPL	AY F	ORMA	Г		

os MARPAT 142:336364

GI

$$R^{1-CH} \longrightarrow N-Z-R^{2}$$

HO CH
$$_{\rm CF_3}$$
 $_{\rm CF_3}$ $_{\rm CF_3}$

A medicine having plasminogen activator inhibitor-1 (PAI-1) inhibiting activity comprises as an active ingredient a compound of the general formula (I) [wherein R1, R2 = (un)substituted aromatic groups; W = a group selected from among linkage groups of formulas -X-C(:X)- and -C(R3):N- (wherein the left side bonds effect linkage with a carbon atom while the right side bonds effect linkage with a nitrogen atom; X = sulfur atom or NH; Y =

oxygen or sulfur atom; R3 = a hydrocarbon group, hydroxyl, or carboxyl); Z = a single bond or a linkage group whose main chain has 1 to 3 atoms] or a salt thereof. This medicine is useful for the prevention and/or treatment of diseases caused by increased activity of PAI-1 or diseases caused by ≥ 2 of unusual states selected from thrombogenesis, fibrosis, organ fat accumulation, cell proliferation, angiogenesis, deposition or reconstruction of outer cellular matrix, and cell migration or metastasis. Thus, a mixture of 0.15 mmol 3,4-dihydroxybenzaldehyde, 0.15 mmol 3=13,5-bis(trifluoromethyl)benzyllthiazolidine-2,4-dione, and 4 mL toluene was treated with two drops of AcOH and two drops of piperidine and heated at 90° for 40 min to give

5-(3,4-dihydroxybenzylidene)-3-[3,5-

bis(trifluoromethyl)benzyl]thiazolidine-2,4-dione (II). II at 25 μM in vitro inhibited >99% inactivation of 2-chain tissue-type plasminogen activator (tPA) by human PAI-1.

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 12 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:493561 CAPLUS
- DN 141:54365
- TI Preparation of 1,3,5-triazines as kinase inhibitors for treatment of angiogenesis or vasculogenesis
- IN Armistead, David M.; Bemis, Jean E.; Buchanan, John L.; Dipietro, Lucian V.; Elbaum, Daniel; Geuns-Meyer, Stephanie D.; Habgood, Gregory J.; Kim, Joseph L.; Marshall, Teresa L.; Novak, Perry M.; Nunes, Joseph J.; Patel, Vinod F.; Toledo-Sherman, Leticia M.; Zhu, Xiaotian
- PA Amgen Inc., USA
- SO U.S. Pat. Appl. Publ., 300 pp., Cont. of U.S. Ser. No. 85,053, abandoned. CODEN: USXXCO
- DT Patent
- LA English

FAN.	CNT 2				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20040116388	A1	20040617	US 2003-699518	20031031 <
	US 7074789	B2	20060711		
	ES 2306671	T3	20081116	ES 2000-972036	20001006
PRAI	US 1999-158176P	P	19991007		
	US 1999-166978P	P	19991123		
	US 1999-170378P	P	19991213		
	US 2000-183263P	P	20000217		
	US 2000-215576P	P	20000630		
	US 2000-219801P	P	20000720		
	US 2000-685053	B1	20001006		
OS	MARPAT 141:54365				
GI					

NHR6, NR5R5, NR5R6, SR5, SR6, SR3, OR5, OR6, OR3, COR3, (un)substituted heterocyclyl, alkyl; R3 = independently aryl, (un)substituted Ph, heteroaryl; R5 = independently H, alkynyl, cycloalkenyl, aryl, R9, (un) substituted (cyclo) alkyl, alkenyl; R6 = independently COR5, CO2R5, CONR5R5, C(=NR5)NR5R5, SO1-2R5; R8 = independently (un)substituted (hetero)monocyclyl, (hetero)bicyclyl, (hetero)tricyclyl] were prepared as inhibitors of enzymes that bind to ATP or GTP and/or catalyze phosphoryl transfer. Examples include a number of general synthetic methods, specific exptl. details for the preparation of selected invention compds., and phys. and bioassay data. For instance, 2.4-dichloro-1.3.5-triazine was coupled with 3,4,5-trimethoxyaniline in the presence of diisopropylethylamine in DMF to give the triazinamine (37%). Subsequent reaction with 4-aminoveratrole using diisopropylethylamine in EtOH provided II (66%). The latter was one of over 950 invention compds. tested for activity against the EGFR-1, IGFR-1, Akt3-1, Met-1, KDR-1, Zap-1, Lck-1, Itk-1, PDGFRB-1, Tek-1, ErbB2-2, EPHB4-1, ErbB4-1, FGFR1-1, Flt-1, Fyn-1, Hck-1, Lyn-1, Ret-1, and/or Src-1 receptors with IC50 values in ranges from <0.4 µg/mL to >4.5 µg/mL. Thus, I and their compns. are useful for the treatment of diseases or conditions involving angiogenesis or vasculogenesis (no data). OSC.G THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS) THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE.CNT 47 ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:485162 CAPLUS
- DN 141:38534
- Preparation of aromatic sulfone hydroxamic acid metalloprotease inhibitors TΤ Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Boehm, Terri L.;
- Carroll, Jeffrey N.; Decrescenzo, Gary A.; Fobian, Yvette M.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Li, Madeleine H.; Hockerman, Susan L.; Howard, Susan C.; Kolodziej, Steve A.; Mischke, Deborah A.; Rico, Joseph G.; Stehle, Nathan W.; Tollefson, Michael B.; Vernier, William F.; Villamil, Clara I.
- PA Pharmacia Corporation, USA
- U.S., 403 pp., Cont.-in-part of U.S. Ser. No. 311,837. SO
- CODEN: USXXAM
- DT Patent
- T.A English
- FAN.CNT 5

PAN.CN																		
P.	ATENT				KIN	D				APPL								
-						-												
PI U	S 6750	228			B1		2004	0615		US 2	000-	5707	31		20	0000	512 -	<
U	S 2001	0014	688		A1		2001	0816		US 1	998-	1911	29		19	9981	113 -	<
U	S 2001	.0039	287		A1		2001	1108		US 1	999-	2569	48		19	9990	224	<
C	A 2372	934			A1		2000	1123		CA 2	000-	2372	934		20	0000	515	
W	0 2000									WO 2	000-	1867	19					
		AE,																
								EE,										
								KG,										
								MW.										
																		014
								TR,										ZW
	RW:	GH,																
								IE,						SE,	BF,	ВJ,	CF,	
								ML,										
E	P 1183	239			A1		2002	0306		EP 2	000-	9300	88		20	0000	515	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO											
H	U 2002	20016	80		A2		2002	0928		HU 2	002-	1680			20	0000	515	
H	U 2002	20016	80		A3		2002	1228										
В	BR 2000010562				A		2003	0610		BR 2	000-	1056	2		20	0000	515	
	JP 2003520196									JP 2	000-	6182	38		20	0000	515	
	JP 2003520196																	

	ΑU	766792		B2	20031023	AU	2000	-47970		20000515	
	NZ	515217		A	20040430	NZ	2000)-515217		20000515	
	US	20020177588		A1	20021128	US	2001	L-954451		20010917	<
	US	6750233		B2	20040615						
	ZA	2001009006		A	20021202	ZA	2001	L-9006		20011031	
	NO	2001005543		A	20020110	NO	2001	L-5543		20011113	
	MX	2001011569		A	20050620	MX	2001	L-11569		20011113	
	US	20030073718		A1	20030417	US	2001	L-989943		20011121	<
	US	6683093		B2	20040127						
	US	20040209914		A1	20041021	US	2003	3-730403		20031208	<
	US	20040235818		A1	20041125	US	2003	3-747796		20031229	<
PRAI	US	1997-66007P		P	19971114						
	US	1998-95347P		P	19980804						
	US	1998-101080P		P	19980918						
	US	1999-256948		B2	19990224						
	US	1999-311837		A2	19990514						
	US	1998-95501P		P	19980806						
	US	1998-186410		B2	19981105						
		1998-191129		B2	19981113						
	US	2000-570731		A	20000512						
		2000-US6719		W	20000515						
	US	2001-989943		A3	20011121						
ASSI	SNME	INT HISTORY FOR	US	PATEN:	T AVAILABLE	IN	LSUS	DISPLAY	FORMAT		

MARPAT 141:38534

OS GI

AB A treatment process is disclosed that comprises administering an effective amount of an aromatic sulfone hydroxamic acid I [W = H, cation, certain acyl or thioacyl groups; m, n, p = 0-2; (m+n+p) = 1 to 4; Z = (un) substituted NH; X, Y = (un) substituted CH2; A = bond, O, S, (un) substituted NH, COO, COC, CH:CR, C.tplbond.C, N:N, NNHN, NHCOO, (un) substituted NH, COO, ochec: R = alkylene, arylene, heteroarylene, etc., with provisos; E = bond, CONH, NHCO, CO, SO2, NHSO2, SO2NH, S, etc.; Y2 = absent, H, alkyl, alkoxy, aryl, aryloxy, heteroaryl, etc.] to a host having a condition associated with

pathol. matrix metalloprotease (MMP) activity. I exhibit excellent inhibitory activity of one or more MMP enzymes, such as MMP-2, MMP-9 and MMP-13, while exhibiting substantially less inhibition of (at least) MMP-1 (biol. data given). Also disclosed are metalloprotease inhibitor compds. having such selective activities, processes for manufacture of such compds., and pharmaceutical compas. using such inhibitors. The compds are potentially useful against a wide variety of conditions, notably as antiosteoarthritic, antiangiogenesis, and antitumor agents. Over 900 example compds. are listed, most with supporting phys. data, and many with synthetic details. E.g., a multi-step synthesis of the compound II.2HCl was given.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 14 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2004:430796 CAPLUS

DN 141:7139

TI Preparation of indolylquinoxalinones for treating hyperproliferative disorders and diseases associated with angiogenesis

IN Ladouceur, Gaetan H.; Bear, Brian; Bi, Cheng; Brittelli, David R.; Burke, Michael J.; Chen, Gang; Cook, James; Dumas, Jacques; Sibley, Robert; Turner, Michael R.

PA Bayer Pharmaceuticals Corporation, USA

FO PCT Int. Appl., 217 pp.

CODEN: PIXXD2

DT Patent LA English

FAN.CNT 1

11111			.00		KIN	D	DATE			ICAT			D	ATE		
PI	WO 2								WO 2	003-	US36	003				
		₩:								BG,						
										EE,						
										KE,						
										MN,						
										SE,				ТJ,	TM,	
										VN,						
		RW:								SZ,						
										BG,						
										MC,						
										GQ,						TG
										2003-						
										2003-						
	EP :									2003-						
		R:								IT,					PT,	
										TR,						
	BR 2	20030	0161	69	A		2005	0927	BR 2	2003-	1616	9	21	0031	110	
	CN .	17381	814		A		2006	0222		2003-						
	JP :	2006	5098	40	Т		2006	0323		2005-						
								0722		2005-						
		20060								2005-						<
PRAI		20050						0609 1112	NO 2	2005-	2/96		2	0050	509	
PRAI																
		2003- 2003-						0407								
		2003- 2003-					2003 2003	0630								
0.0					W		2003	1110								
OS	MARI	PAT .	141:	/139												

AB The invention relates to title compds. I [wherein Ar = 6-membered aromatic ring containing 0-2 N atoms; R1 and R2 = independently H, halo, CF3, acyl, piperidinyl, piperazinyl, morpholinyl, or (un)substituted alkyl, alkoxy, amino, pyrrolidinyl, Ph, etc.; R3 = H, alkyl, OH, NO2, NH2, alkylamino, alkoxyamino, or (un) substituted benzoylamino; R4 = H, OH, halo, CN, acyl, sulfamoyl, trialkylsiloxy, tetrazolyl, thienyl, pyrrolyl, pyrimidinyl, oxazolyl, furanyl, or (un)substituted alkyl, alkenyl, alkynyl, alkoxy, amino, oxadiazolyl, Ph, pyridyl(oxy), carbamoyl; R11 and R12 = independently H, F, or Cl with the proviso that when one of R11 and R12 = F or C1, the other must be H; and pharmaceutically acceptable salts and esters thereof]. The invention also relates to the use of I and their pharmaceutical compns. for treating hyperproliferative disorders and diseases associated with angiogenesis (no data). Examples include representative syntheses for compds. of the invention, pharmaceutical compns. comprising them, and tumor model assays (no specific data given). For instance, N-Boc-indole was coupled with di-Me oxalate using t-BuLi to give tert-Bu 2-[methoxy(oxo)acetyl]-1H-indole-1-carboxylate (72%). Cyclization of the

ΙI

dione with 1,2-phenylenediamine in AcOH afforded the quinoxalinone II (77%). osc.g 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS) RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 15 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- ΑN 2003:376549 CAPLUS
- DN 138:385306
- ΤI Preparation of substituted 4-phenvl-4-(1H-imidazol-2-vl)piperidine derivatives for reducing ischemic damage
- IN Janssens, Frans Eduard; Leenaerts, Joseph Elisabeth; Fernandez-Gadea, Francisco Javier; Gomez-Sanchez, Antonio; Flameng, Willem; Herijgers, Paul Joannes Ludovicus; Meert, Theo Frans; Borgers, Marcel J. M.
- Janssen Pharmaceutica N.V., Belg. PΑ
- SO PCT Int. Appl., 75 pp.
- CODEN: PIXXD2 Patent DT
- English

FAN.	CNT	1																
	PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
						best best best	-				-							
PI	WO 2003039440 WO 2003039440				A2		2003	0515		WO 2	002-	EP11	371		2	0021	010	
	WO	2003	0394	40		A3		2003	1218									
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,

			UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW							
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
			KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
			FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,	
			CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
		24623																	
	AU	20023	3633	69		A1		2003	0519		AU 2	002-	3633	69		2	0021	010	
	AU	20023	3633	69		B2		2008	0821										
	EP	14380)49			A2		2004	0721		EP 2	002-	7990	40		2	0021	010	
	EP	14380	149			B1		2006	1122										
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK			
	BR	20020	0133	25		A		2004	1013		BR 2	002-	1332	5		2	0021	010	
	CN	15683	186			A		2005	0119		CN 2	002-	8202	96		2	0021	010	
		12832						2006	1108										
		20040							0228		HU 2	004-	2332			2	0021	010	
	HU	20040	0023	32				2009	0728										
	JP	2005	5079	43		T		2005	0324		JP 2	003-	5417	32		2	0021	010	
		53173				A			0428			002-					0021		
		34579				T		2006	1215		AT 2	002-	7990	40		2	0021	010	
	ES	22769	980			Т3		2007	0701		ES 2	002-	7990	40		2	0021	010	
		20041				A			0112			004-					0040		
	za	20040	0028	16		A		2005	0413			004-					0040		
		20040				A			0730			004-							
		20050		170					0106		US 2	004-	4927	78		2	0040	415	<
	US	73908	322			B2		2008	0624										
	NO	20040	0016	81				2004	0423			004 -							
		1072				A1		2007	0622		HK 2	005-	1053	75		2	0050	628	
PRAI	EP	2001	-203	927		A		2001	1015										
	WO	2002-	-EP1	1371		W		2002	1010										

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 138:385306

GI

AB

alkyl, RI = H, alkoxy, alkylcarbonyloxy, aryloxy, etc.; R2 = OH, alkoxy, alkylcarbonyloxy, phenyloxy, etc.; R3 = alkyl, aryl, heteroaryl, etc.; R4-5 = H, alkyl, carboxy, aminocarbonyl, etc.; p = 0-3] are prepared N-[chloro(1-methyl-4-phenyl-4piperidinyl)methylene|benzenemethanamine•HCl (100%). Addition of dimethoxyethanamine in DMF to give the piperidinecarboximidamide (100%), followed by reduction with NaOH provided
1-methyl-4-phenyl-4-[1-(phenylmethyl)-1H-imidazol-2-yl]piperidine (25%). Amidation with Et chloroformate in the presence of K2CO3 and DEA in toluene gave II (86 %). All compds. of the invention showed a pIC50 = 7-8 for the δ-opioid receptor and a pIC50 ≤ 6 for the μ- and

Title compds. I [A=B = bivalent π -bond radical; X = covalent bond,

 $\kappa\text{-receptor}$ in [35]GTPyS radioligand binding assays. I are used for the treatment of ischemic damage to an organ (heart, brain) and for the prevention of coronary artery diseases by inducing a cardioprotective effect and the treatment and prevention of stroke.

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 16 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2003:261813 CAPLUS
- DN 138:287667
- TI Preparation of 1-[2-(aryloxy)ethy1]-1H-pyrazoles useful in the treatment of hyper-proliferative disorders
- IN Khire, Uday, Zhang, Chengzhi, Kluender, Harold C. E.; Mugge, Ingo; Hong, Zhengiu; Shao, Jianxing; Bifulco, Neil; Trail, Pamela A.; Dumas, Jacques; Lavoie, Rico C.; Liu, Xiao-Gao; Agarwal, Veena; Verma, Sharad K.; Wang, Lei
- PA Bayer Corporation, USA
- SO PCT Int. Appl., 121 pp. CODEN: PIXXD2
- DT Patent
- LA English
- LA Englis

		NT 1	10.			KIN)	DATE				ICAT				D	ATE	
ΡI						A1		2003								2	0020	920
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
								YU,										
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
								ΙT,								BF,	ВJ,	CF,
			CG,	CI,				GQ,										
	CA 2	4611	128			A1		2003	0403		CA 2	002-	2461	128		2	0020	920
								2003										
								2004										
		R:						ES,									MC,	PT,
								RO,										
								2005										
											US 2	004-	4897	96		2	0040	315 <
PRAI	US 2																	
								2002										
ASSI	GNMEN			RY F		S PA:	TEN1	AVA	ILAB:	LE I	N LS	US D	ISPL	AY F	AMAC	Γ		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN ESUS DISPLAT FORMA.
OS MARPAT 138:287667
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I and II (wherein Rl = H, halo, or CN; R2 = H, CN, COR6, halo, or alkyl; R3 = CF3 or (un)substituted alkyl, Ph, furyl, thienyl, isoxazolyl, pyridyl, or benzodioxolyl; R4 = H, alkyl, halo, or CN; X = O or NH; R5 = (un)substituted alkyl; R6 = H or alkyl; R7 = alkoxy, Br, Cl, F, CF3, CN, CO2H, NHCORl4, or (un)substituted alkyl; Ph, thienyl, pyridyl, pyrrollyl, furyl, oxazolyl, benzothienyl, benzofuryl, morpholinyl, pyrrolidinyl, piperidinyl, naphthyl, or

benzodioxolyl; Y = H, alkyl, alkoxy, CN, or halo; R8 = (un)substituted Ph; R9 = H, alkyl, Br, C1, or F; R10 = (un)substituted alkyl; R14 = alkyl; n = 0-2; or pharmaceutically acceptable salts thereof] were prepared as angiogenesis inhibitors. For example, etherification of 1,6-dibromo-2-naphthol with dibromoethane gave the bromoethoxy derivative (93%). Addition of NH2NH2·H2O in 2N HCl and CH2Cl2 provided 1-[2-[(1,6-dibromo-2-naphthyl)oxy]ethyl]hydrazine•HCl (78%). Cyclization of the hydrazine with Et benzoylacetate afforded the pyrazolone (39%), which was treated with 1,1'-(azodicarbonyl)dipiperidine, PBu3, and EtOH to give III (78%). In an in vivo tumor model assav using human colon tumor HCT-116 cells implanted in mice, I and II significantly inhibited tumor growth compared to controls. All treatments were well tolerated with no lethality or weight loss in any group. Thus, I and II are useful for the treatment of hyper-proliferative disorders and angiogenesis dependent disorders, especially colon, breast, and lung cancer.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:906195 CAPLUS
- DN 138:4618
- TI Preparation of 3-quinoline-2(1H)-ylideneindolin-2-one derivatives as vascular endothelial growth factor (VEGF) inhibitors
- IN Samizu, Kiyohiro; Hisamichi, Hiroyuki; Matsuhisa, Akira; Kinoyama, Isao; Hayakawa, Masahiko; Taniguchi, Nobuaki; Ideyama, Yukitaka; Kuromitsu, Sadao; Yahiro, Kiyoshi; Okada, Minoru
- PA Yamanouchi Pharmaceutical Co., Ltd., Japan
- SO PCT Int. Appl., 65 pp.

MARPAT 138:4618

- CODEN: PIXXD2
- DT Patent
- LA Japanese

PAU.	TAT	1																	
	PA:	CENT :	NO.			KIN)	DATE								D,	ATE		
							-												
PI	WO	2002	0948	09		A1		2002	1128	1	WO 2	002-	JP50:	14		2	0020	523	
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,	
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	
			UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW									
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
	CA	2448	076			A1		2002	1128		CA 2	002-	2448	076		2	0020	523	
	ΑU	2002	2582:	26		A1		2002	1203	- 2	AU 2	002-	2582:	26		2	0020	523	
	EP	1396	490			A1		2004	0310	1	EP 2	002-	7281	31		2	0020	523	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
	CN	1511	151			A		2004	0707		CN 2	002-	8105	34		2	0020	523	
	IN	2003	MN01	060		A		2005	0429		IN 2	003-1	MN10	60		2	0031	119	
	US	2005	0090	498		A1		2005	0428	1	US 2	003-	4785	04		2	0031	124 <	-
PRAI	AI JP 2001-155761 A 200105						0524												
	WO 2002-JP5014 W 20020						0523												

CT

$$(\mathbb{R}^2)_{\mathfrak{m}} \stackrel{B}{\underset{E}{\longrightarrow}} \underset{\mathfrak{m}}{\overset{A}{\longrightarrow}} \underset{\mathfrak{m}}{\overset{G}{\longrightarrow}} (\mathbb{R}^1)_{\mathfrak{m}}$$

Novel 3-(1,2-dihydroguinolin-2-ylidene)indolin-2-one derivs, represented by the following general formula (I) or salts thereof [wherein A, B, E, G, J= N, CH; R1, R2 = lower alkyl, alkenyl, or alkynyl, Ra, X-(C1-8 alkylene optionally substituted by ORb)-Ra, X-C1-8 alkenylene-Ra, X-C1-8 alkynylene-Ra, provided that R1 and R2 are not substituted on N atom; X = O, CO, CO2, O2C, S, SO, SO2, NRb, NRbSO2, SO2NRb, CONRb, NRbCO, NRbCONRb, NRbCO2, O2CNRb, a single bond; wherein Ra = halo-lower alkyl, halo, NO2, cyano, ORb, O-lower alkylene-NRbRc, CO2Rb, CORb, CONRbRc, NRbRc, NRd-lower alkylene-NRbRc, etc.; Rb, Rc, Rd = H, lower alkyl, lower alkylene-RIN; RIN = (un)substituted saturated heterocyclyl, cycloalkyl, aryl, or heteroaryl; n, m = an integer of 0-4; provided that when A, B, E, E, G, and J are simultaneously C, they are not simultaneously N] are prepared Theses compds. have excellent effects of inhibiting VEGF and angiogenesis and an antitumor effect and, therefore, are useful as appropriate VEGF inhibitors, angiogenesis inhibitors and anticancer agents. They are useful as remedies for diseases in which angiogenesis participates, e.g. solid tumors and diabetic retinopathy. Thus, 0.3 mL benzoyl chloride was added to a solution of 510 mg 6-[2-(1H-1,2,3-triazol-1-yl)ethoxy]quinoline N-oxide in 25 mL CHC13 under 265 mg indolidin-2-one, and the resulting mixture was refluxed at 90° for 8 h to give 3-[6-[2-(1H-1,2,3-triazol-1-y1)ethoxy]quinolin-2(1H)-

ice-cooling and stirred at the same temperature for 30 min, followed by adding vlidene]isoindolin-2-one (II). II and 5-fluoro-3-(quinolin-2(1H)-ylidene)isoindolin-2-one showed IC50 of 0.14

and 0.00097 µM, resp., for inhibiting the human recombinant VEGF-promoted uptake of [3H]thymidine in human umbilical vein endothelial cells (HUVEC).

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 18 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:276540 CAPLUS
- DN 136:309925
- TΙ Preparation of pyrazole compounds as cell proliferation inhibitors
- Zhang, Zaihui; Yan, Jun; Leung, Danny; Costello, Penelope C.; Sanghera, TN Jasbinder; Daynard, Timothy Scott; Wang, Shisen; Chafeev, Mikhail
- PA Kinetek Pharmaceuticals, Inc., Can.
- SO U.S. Pat. Appl. Publ., 31 pp., Cont.-in-part of U.S. 6,214,813. CODEN: USXXCO
- Patent
- LA English
- FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20020042501	A1	20020411	US 2000-747563	20001222 <
	US 6436915	B2	20020820		
	US 6214813	B1	20010410	US 2000-544908	20000407 <
	CA 2405408	A1	20011018	CA 2001-2405408	20010126
	WO 2001077080	A2	20011018	WO 2001-CA89	20010126
	MO 2001077080	7/3	20020228		

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W: AU, CA, JP, US
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE, TR
    EP 1276723
                        A2
                             20030122
                                        EP 2001-902197
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY, TR
    US 20030060453
                             20030327
                                        US 2002-77238
                       A1
                                                              20020215 <--
    US 7105503
                       B2
                            20060912
PRAI US 2000-544908
                      A2 20000407
    US 2000-747563
                       A
                             20001222
    WO 2001-CA89
                       W
                             20010126
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 136:309925

$$\begin{array}{c|c}
R^3 \\
N \\
N \\
R^2
\end{array}$$

$$N=N (CH_2)_{n}R^5$$

$$R^4$$
I

Claimed is a pharmaceutical composition comprising the title compds. [I; R1 = AB alkyl, aryl, or heteroaryl, which may be substituted with one or more groups selected from C1-C20alkyl, C6-C01aryl, heteroalkyl, and heteroaryl; R2 = H, direct bond; R3, R4 = NH2, NHCOR5; R5 = R6, R7, R8; wherein R6 = alkyl, heteroalkyl, aryl, heteroaryl; R7 = (R6)k-alkylene, (R6)k-heteroalkylene, (R6)k-arylene, (R6)k-heteroarylene; R8 = (R7)k-alkylene, (R7)k-heteroalkylene, (R7)k-arylene, (R7)k-heteroarylene; k = 1, 2, 3, 4, 5; n = 1, 2, 3, 4, 5, stereoisomers, polymorphs, solvates, and pharmaceutically acceptable salts thereof, and a pharmaceutically acceptable carrier, diluent or excipient. Theses compds. have anti-proliferative activity, and may promote apoptosis in cells lacking normal regulation of cell cycle and death. The pharmaceutical formulations are useful in the treatment of hyperproliferative disorders, which disorders include tumor growth, lymphoproliferative diseases, and angiogenesis. Thus, diazotization of p-anisidine with NaNO2 in aqueous HCl, followed by coupling with malononitrile and then cyclocondensation with hydrazine hydrate in EtOH under reflux gave 70% 3,5-Diamino-4-(p-methoxyphenyl)hydrazonopyrazole (II). II and its demethoxy derivative showed IC50's of 1 and 0.6 µM, resp., against integrin linked kinase.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- L3 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2001:923795 CAPLUS
- DN 136:53749
- TI Preparation of heteroarylalkanoic acids as integrin receptor antagonists
- IN Nagarajan, Scrinivasan Raj; Khanna, Ish Kumar; Tollefson, Michael B.; Mohler, Scott B.; Chen, Barbara; Russell, Mark; Devadas, Balekudru; Penning, Thomas D.; Schretzman, Lori A.; Spangler, Dale P.; Boys, Mark Laurence; Chandrakumar, Nizal Samuel; Lu, Hwang-Fun
- PA Pharmacia Corporation, USA
- SO PCT Int. Appl., 368 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

FAN.	PA:	IENT						DATE					ION				ATE	
PI	WO	2001	0963	34		A2		2001	1220								0010	615
		W:	CO, HR, LT, RU,	CR, HU, LU, SD,	CU, ID, LV, SE,	CZ, IL, MA, SG,	DE, IN, MD,	AU, DK, IS, MG, SK,	DM, JP, MK,	DZ, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,	GM, LS, RO,
	IIG		GH, DE, BJ,	DK, CF,	KE, ES, CG,	LS, FI, CI,	FR, CM,	MZ, GB, GA,	GR, GN,	IE, GW,	IT, ML,	LU, MR,	MC, NE,	NL, SN,	PT, TD,	SE, TG	TR,	
	US	6933 1289	304			B2		2005	0823									
			IE,	SI,	LT,	LV,	FI,	ES, RO,	MK,	CY,	AL,	TR						
	US	2004 2004 7119	0092	497		A1		2004	0513									615 905 <
PRAI	US US	2000 2000	-211 -211	781P 782P		P		2000 2000	0615 0615									
3007		2001													00143			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 136:53749 GI

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

Title compds. A1Z2Z1AXYY5(Y3)(Y4)CH2CORb [I; wherein ring A = (un)substituted 4-8 membered monocyclic or 7-12 membered bicyclic ring containing 1-4 heteroatoms, selected from O, N, or S; A1 = (un)substituted 5-9 membered monocyclic or 7-14 membered polycyclic heterocycle containing at least 1 N and optionally 1-4 heteroatoms or groups selected from O, N, S, SO2, or CO; Z1 = CH2, O, CH2O, NH, CO, S, SO, CH(OH), and SO2; Z2 = (un) substituted 1-5 C linker optionally containing 1 or more heteroatoms selected from O, S, and N; Z1Z2 may contain a carboxamide, sulfone, sulfonamide, alkenyl, alkynyl, acyl, or (un)substituted 5- or 6-membered (hetero)aryl; X = CHRe, NRf, O, S, SO2, or CO; Re = H, (cyclo)alkyl, alkoxy(alkyl), OH, alkynyl, alkenyl, haloalkyl, thioalkyl, or aryl; Rf = H, (halo)alkyl, aryl, or benzyl; Y = (CH2)p, CHRq, NRq, CO, or SO2; Rq = H, (halo)alkyl, alkoxyalkyl, alkynyl, (hetero)aryl, OH, alkoxy, or carboxyalkyl; p = 0-1; XY may contain acyl, alkyl, sulfonyl, amino, (thio)ether, carboxamido, sulfonamido, aminosulfonyl, or olefin; Y3 and Y4 = independently H, (halo)alkyl, halo, (hetero)aryl, hydroxyalkyl, alkynyl, etc.; Rb = X2Rh; X2 = O, S, or NRj; Rh and Rj = independently H, (ar) alkyl, acyl, or alkoxyalkyl; with provisos] and their pharmaceutically acceptable salts were prepared for selectively antagonizing the ανβ3 and/or the ανβ5 integrin without significantly antagonizing the fibrinogen IIb/IIIa integrin. For example,

3-(hydroxymethyl)benzonitrile was protected with 3,4-dihydro-2H-pyran (89%) and treated with HONH2.HCl to give the benzenecarboximidamide (98%). Cyclization with 3-methylglutaric anhydride in the presence of MeI (64%) and deprotection (98%) gave the Me 1,2,4-oxadiazolebutanoate (64%). Oxidation to the aldehyde, followed by reductive addition of 2-aminopyridine

and

workup, afforded the oxadiazolebutanoic acid (II). In vitronectin adhesion assays, I antagonized the αvβ3 integrin and the ανβ5 integrin with IC50 values of 0.1 nM to 100 μM and < 50 uM, resp. I are useful for the treatment of tumor metastasis, solid tumor growth, angiogenesis, osteoporosis, humoral hypercalcemia of malignancy, smooth muscle cell migration, restenosis, atherosclerosis. macular degeneration, retinopathy, and arthritis (no data).

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS) OSC.G 5 RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 20 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2001:851123 CAPLUS
- DN 136:5985
- TT Preparation of tricyclic pyrazole derivatives as tyrosine kinase
- inhibitors for treatment of angiogenesis-related diseases

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- Dovle, Kevin J.; Rafferty, Paul; Steele, Robert W.; Wilkins, David J.; Arnold, Lee D.: Hockley, Michael: Ericsson, Anna M.: Iwasaki, Nobuhiko: Ogawa, Nobuo
- Knoll G.m.b.H., Germany PA PCT Int. Appl., 183 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 3

		rent :															ATE	
PI	WO	2001	0878	46		A2		2001	1122 0321					153			0010	
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,
			UZ,	VN,	YU,	ZA,	ZW											
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		2409																
	EP	1289							0312									
		R:							FR,				LI,	LU,	NL,	SE,	MC,	PT,
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OS MARPAT 136:5985

Title compds. I [m = 1-10; X = (CH2)n, CO, O, C:NOR10, NR11, (CH2)n, S, SO, or SO2; n = 1-3; R10 = alkvl; R11 = (un)substituted alkvl or Ph; B = (cyclo)alkyl, aryl, pyridyl, thienyl, furyl, or pyrrolyl; R1 = H, halo, OH, NO2, CN, hydroxyamidino, CH2NH2, formamidomethyl, (un)substituted alkenyl(oxy), alkynyl, or YW; Y = absent or alkyl, alkoxy, O, S, or CO; W = H, OH, (un)substituted Ph, alkoxy, or amino; ring A is optionally substituted with halo, OH, NO2, CN, or (un) substituted alkyl, alkoxy, PhO, carboxy, carbamoyl, amino, amido, aralkyl, alkenyl, or alkynyl; with provisos; and racemic mixts., racemic diastereomeric mixts., tautomers, optical isomers, and pharmaceutically acceptable salts thereof] were prepared as protein kinase inhibitors, especially tyrosine kinase inhibitors. Thus, indan-1-one hydrazone (preparation given) in THF at 0° was treated with BuLi and then with Me 3,4,5-trimethoxybenzoate to give 3-(3,4,5-trimethoxyphenyl)-1,4-dihydroindeno[1,2-c]pyrazole. Example compds. significantly inhibited KDR kinase at concns. of ≤ 50 uM.

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 21 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2001:31473 CAPLUS
- DN 134:100864
- TI Indazole compounds and pharmaceutical compositions for inhibiting protein kinases, and methods for their use
- IN Kania, Robert Steven; Bender, Steven Lee; Borchardt, Allen J.; Braganza, John F.; Cripps, Stephan James; Hua, Ye; Johnson, Michael David; Johnson, Theodore Otto, Jr.; Luu, Hiep The; Palmer, Cynthia Louise; Reich, Siegfried Heinz; Tempczyk-russell, Anna Maria; Teng, Min; Thomas, Christine; Varney, Michael David; Wallace, Michael Brenare, Michael
- PA Agouron Pharmaceuticals, Inc., USA
- SO PCT Int. Appl., 439 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

PI WO 2001002369 A2 20010111 WO 2000-US18263 WO 2001002369 A3 20020425 A5 E5	FAN.CNT PA	ATENT NO.	KIND DATE	APPLICATION NO.	DATE
M: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, C CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, C ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, I LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, I SG, SI, SK, SI, TJ, TM, TR, TT, TZ, UA, UG, UZ, Y MZ, SZ, BE, CY, FR, GR, IE, IT, MC, NL, BF, BJ, C GA, GN, GW, ML, MR, NE, SN, TD, TG RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, J				WO 2000-US18263	20000630
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, I LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, F SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, V, MZ, SZ, BE, CY, FR, GR, IE, IT, MC, NL, BF, BJ, C GA, GN, GW, ML, MR, NE, SN, TD, TG RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, 2	WO	W: AE, AG, A	, AM, AT, AU, AZ,		
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, V MZ, SZ, BE, CY, FR, GR, IE, IT, MC, NL, BF, BJ, (GA, GN, GW, ML, MR, NE, SN, TD, TG RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, 1					
MZ, SZ, BE, CY, FR, GR, IE, IT, MC, NL, BF, BJ, (GA, GN, GW, ML, MR, NE, SN, TD, TG RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, 7					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, A		MZ, SZ, B	, CY, FR, GR, IE,	IT, MC, NL, BF, BJ, CF,	
DE DV DC DT DD CD CD TD TT III MC NI I					BE, CH, CY,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,					SE, BF, BJ,
CA 2383630 A1 20010111 CA 2000-2383630 CA 2383630 C 20081118		A 2383630	A1 20010111		20000630

	BR	2000	0123	52		A	2	2002	0514		BR	20	00-	1235	2		2	0000	630	
	EP	1218	348			A2	2		EP	20	00-	9433	75		2	0000	630			
	EP	1218	348			В1	2	2007	1024											
			AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF		IT,	LI,	LU,	NL,	SE,	MC,	PT,	
							FI,													
	HU	2002	0024						1128				02-	2490			2	0000	630	
			20024			A3	2	2003	0128											
	JP	2003	5034	81		Т	2	2003	0128		JΡ	20	01-	5078	09		2	0000	630	
		3878				B2	2	2007	0207											
		5166				A	2	2003	0207 0926		NZ	20	00-	5166	76		2	0000	630	
		1137				С	2	2004	0211						21		2	0000	630	
		1495				A	2	2004	0211 0512		CN	20	03-	1548	58			0000		
		1234				C	2	2006	0104											
	AU	7777	01			B2	2	2004	1028		AU	20	00-	5785	2		2	0000	630	
		1486				A	2	2005	1231		AP	20	02-	2392				0000		
			GH,	GM.	KE.															
	EP	1614		,	,	A1			0111								2	0000	630	
			1683			B1			1121											
			AT,		CH.						GF		IT.	LI.	LU.	NL.	SE.	MC.	PT.	
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	AT	3765				т	- 2	2007	1115		AΤ	20	00-	9433	75		2	0000	630	
		1467				Ā	2 2 2	2008	0106		IL	20	00-	1467	10				c 2 0	
	ES	2293	906			Т3	2	2008	0401		ES	20	00-	9433	75		2	0000	630	
	ES	2296	014			Т3	2	2008	0416		ES	20	05-	1590	2		2	0000	630	
	EG	2387	17			A	2	2007	1128		EG	20	00-	1134			2	0000	905	
	NO	2001	0057 0057	97		A	2	2002	0301 1016		NO	20	01-	5797			2	0011		
	NO	3225	07			B1	2	2006	1016											
	ZA	2001	0100	61		A	- 2	2003	0206		ZA	20	01-	1006	1		2	0011	206	
			0127			A A	2	2002	0902		MX	20	01-	1279	5		2	0011	211	
	BG	1063	80			A	2	2002	0902 0930		BG	20	02-	1063	80		2	0020	201	
	HR	2002	20001	09		B1	2	2008	0731		HR	20	02-	109			2	0020	204	
	HK	1048	8813			A1	2	2004	1210		HK	20	03-	1010	00		2	0030	212	
	HK	1065	037			A1	2	2006	0825		HK	20	04-	1077	97		2	0030	212	
	US	2004	0171	634		A1	2	2004	0825 0902		US	20	03-	3267	55		2	0030	213	<
	US	6884	1890			B2	- 2	2005	0426											
	NO	2006	0005	96		A	2	2002	0426 0301		NO	20	06-	596			2	0060	206	
	HK	1085	470			A1	2	2008	0206		HK	20	06-	1054	62		2	0060	510	
	JP	2006	3480	43		A			1228					2329			2	0060	830	
	JP	3969	669			B2	2	2007	0905											
	IN	2007	DN04	518		A	2	2007	0831		IN	20	07-	DN45	18		2	0070	613	
PRAI	US	1999	-142	130P		P			0702											
			-943			A3			0630											
	JP	2001	-507	809		A3	2	2000	0630											
			-609			В3		2000	0000											
	WO	2000	-US1	8263		W	2	2000	0630											
	US	2001	-983	786		A3	2	2001	1025											
	IN	2001	-114	8		A3	2	2001	1212											
			-101				2													
0.5			134.		6.4															

OS MARPAT 134:100864 GI

AB Indazole compds. I [R1 = substituted or unsubstituted aryl or heteroaryl, R3CH:CH, R3N:CH; R2 = substituted or unsubstituted aryl, heteroaryl, Y-X; R3 = substituted or unsubstituted alkyl alkenyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl; Y = O, S, C(:CH2), CO, SO, SO2, alkylidene, NH, N(C1-C8 alkyl); X = substituted or unsubstituted aryl, heteroaryl, NH(alkyl), NH(cycloalkyl), NH(heterocycloalkyl), NH(aryl), NH(heteroaryl), NH(alkoxy), NH(dialkylamide)] and their pharmaceutically acceptable prodrugs, active metabolites, and salts are disclosed. The compds. modulate and/or inhibit the activity of certain protein kinases. In particular, I and pharmaceutical compns. containing them are capable of mediating tyrosine kinase signal transduction, and thereby modulate and/or inhibit unwanted cell proliferation. The invention is also directed to the therapeutic or prophylactic use of pharmaceutical compns. containing such compds., and to methods of treating cancer and other disease states associated with unwanted angiogenesis and/or cellular proliferation, such as diabetic retinopathy, neovascular glaucoma, rheumatoid arthritis, and psoriasis, by administering effective amts. of such compds. E.g., I [R1 = (E)-3,4-(MeO)2C6H3CH:CH; R2 = 4-HO-3-MeOC6H3] (II) was prepared from 6-aminoindazole by diazotization and substitution with iodide, protection of the indazole nitrogen with 2,4,6-Me3C6H2SO2Cl, coupling of the regioisomeric mixture with 4-(methoxymethoxy)-3-methoxybenzeneboronic acid in the presence of dichlorobis (triphenylphosphine) palladium, and deprotection of the indazole moiety and iodination at the 3-position of the indazole. Treatment of the 3-indazolyl iodide with sec-butyllithium, phenyllithium, and DMF, regioselective protection of the indazole with 2,4,6-Me3C6H2SO2Cl, olefination with 3,4-dimethoxybenzyltriphenylphosphonium bromide, deprotection of the indazole, deprotection of the methoxymethyl group, and equilibration of the double bond with iodine gave II. Biol. data on protein kinase

and i.p. and oral bioavailability, are given. OSC.G 43 THERE ARE 43 CAPLUS RECORDS THAT CITE THIS RECORD (61 CITINGS) RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

inhibition, cell proliferation inhibition, neovascularization inhibition,

L3 ANSWER 22 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN AN 2000:553575 CAPLUS

DN 133:164006

ΤI Preparation of sulfamato hydroxamic acid metalloprotease inhibitors

TN De Crescenzo, Gary A.; Rico, Joseph G.; Boehm, Terri L.; Carroll, Jeffery N.; Kassab, Darren J.; Mischke, Deborah A.

PA G.D. Searle and Co., USA

SO PCT Int. Appl., 628 pp.

CODEN: PIXXD2 DT Patent

English LA. FAN. CNT 1

PAN.CNI I																			
	PATENT NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D)	ATE				
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PI	WO	2000	0462	21		A1 20000810			WO 2000-US3061						20000207				
		W:	ΑE,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,	
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	
			IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	
			SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	zw		
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	
			DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,	
			CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG					
	CA	2362	230			A1		2000	0810		CA 2	000-	2362	230		2	00002	207	
	EP	1157	021			A1		2001	1128		EP 2	000-	9059	96		2	0000:	207	
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	

	IE, SI, LT,	LV. FI.	, RO					
BR	2000008440	A	20020326	BR	2000-8440		20000207	
HU	2002000119	A2	20020629	HU	2002-119		20000207	
HU	2002000119	A3	20030428					
US	6448250	B1	20020910	US	2000-499276		20000207	<
JP	2002536373	T	20021029	JP	2000-597291		20000207	
EE	200100410	A	20021216	EE	2001-410		20000207	
AU	775701	B2	20040812	AU	2000-27574		20000207	
CN	1216056	C	20050824	CN	2000-806033		20000207	
US	6372758	B1	20020416	US	2001-884548		20010619	<
NO	2001003850	A	20010919	NO	2001-3850		20010807	
BG	105788	A	20020228	BG	2001-105788		20010807	
MX	2001007987	A	20020424	MX	2001-7987		20010807	
ZA	2001006492	A	20030507	ZA	2001-6492		20010807	
IN	2001CN01119	A	20050304	IN	2001-CN1119		20010808	
US	6492367	B1	20021210	US	2002-84713		20020226	
US	6800646	B1	20041005	US	2002-262622		20020930	<
	1049660	A1	20060512		2003-100924		20030207	
US	20050049280	A1	20050303	US	2004-887450		20040708	<
US	7067670	B2	20060627					
	1999-119181P	P	19990208					
US								
WO US US	2000-499276 2000-U\$3061 2002-84713 2002-262622	A1 W A3 A3	20000207 20000207 20020226 20020930	Thi I	CHC DIODIAN	FORMAT		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 133:164006

The title compds. R20C(O)CR1R2SO2NR3aR3b (I) [wherein R1 and R2 taken together with the C to which they are attached = (un)substituted heterocyclyl or cycloalkyl; or R1 and R2 = independently H, (un) substituted (cyclo) alkyl, alkyloxylalkyl, alkylthioalkyl, alkenyl, alkynyl, aryl(alkyl), heterocyclyl(alkyl), etc.; R3a and R3b = independently H or (un) substituted alkyl, alkenyl, alkynyl, (hetero) aryl, heterocyclyl, cycloalkyl, or alkoxyalkyl; R20 = OH, alkoxyl, aryloxy, NH-OR22, or NH-OR14; R22 = selectively removable protecting group, such as 2-THP, benzyl, trisubstituted silyl, o-NO2C6H4, etc.; R14 = H, a cation, or acyl] were prepared as selective matrix metalloproteinase (MMP) inhibitors for the treatment of various conditions, such as pathol. breakdown of connective tissue, osteoarthritis, inflammation, tumor growth, and angiogenesis. Examples include the syntheses of over 50 piperidinylsulfonyl and piperazinylsulfonyl hydroxamic acids and their intermediates. In vitro MMP assay data for I show selective inhibition of MMP-2 and MMP-13 compared to MMP-1. Some inhibition assay data for MMP-3, MMP-7, MMP-8, MMP-9, and MMP-14 are also given. Thus, II was prepared in a multi-step sequence involving addition of MeOC(O)C1 to 1-(methylsulfonyl)-4-(benzyloxy)piperidine (4-step

preparation given) to form the methylene sulfonamide, cycloaddn. of dibromodiethyl ether to give the THF-substituted sulfonamide, deesterification, addition of O-(tetrahydro-2H-pyran-2-y1)hydroxylamine to form the THP hydroxamate, and deprotection to yield the desired hydroxamic acid. II inhibited MMP-1, MMP-2, and MMP-13 with IC50 values of < 10,000 nM, 7.0 nM and 20.0 nM, resp.

THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS) RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 23 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN L3
- AN 2000:67499 CAPLUS
- DN 132:108116
- ΤI Preparation of O-substituted fumagillol derivatives with angiogenesis inhibitory activity
- Folkman, Moses J.; Ingber, Donald; Fujita, Takeshi ΤN
- Children's Medical Center Corp., USA PA
- SO U.S., 30 pp., Cont.-in-part of U.S. Ser. No. 811,880, abandoned. CODEN: USXXAM
- DT Patent
- LA English
- EAN ONE 3

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FAIN.	CIAT 2							
	PATENT NO.	KIND	DATE	APPLIC.	ATION NO		DATE	
PI	US 6017954	A	20000125	US 199	2-940123		19920903	<
	US 5290807	A	19940301	US 199	2-917827		19920721	<
	US 5698586	A	19971216	US 199	2-917842		19920721	<
PRAI	US 1989-391980	B1	19890810					
	US 1991-811880	B2	19911219					
	JP 1988-219287	A	19880901					
	JP 1989-53537	A	19890306					
	US 1991-811800	B1	19911219					
ASSI	GNMENT HISTORY FOR U	PATEN:	T AVAILABLE	IN LSUS	DISPLAY	FORMAT		

MARPAT 132:108116

OMe OR2

AB This invention relates to the preparation and use of O-substituted fumagillol derivs. of formula I [R1 = (substituted) 2-methyl-1-propenyl, (substituted) isobutyl; R2 = alkanoyl, aroyl, aromatic heterocycle-carbonyl, carbamoyl, alkyl, alkylsulfonyl, alkoxycarbonyl, etc.], or salts thereof preferably, 0-(N-chloroacetylcarbamoyl)fumagillol, O-(N-chloroacetylcarbamoyl)dihydrofumagillol or O-(N-chloroacetylcarbamoyl)-6'b-hydroxyfumagillol, which have angiogenesis inhibitory activity, in the treatment and prevention of various diseases caused or advanced by abnormally hyperactive angiogenesis, especially various inflammatory diseases (rheumatism, psoriasis, etc.), diabetic retinopathy and cancer and other angiogenesis-dependent tumors, especially Kaposi's sarcoma,

breast cancer, colon cancer. Thus, II (AGM-1470) was prepared from fumagillol and chloroacetyl isocyanate in 71% yield. The T/C ratio of II in the B16 mouse melanoma model was 0.47 after 2 wk and 0.20 after 3 wk.

THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (24 CITINGS)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L3 ANSWER 24 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN
- 1999:404843 CAPLUS AN
- DN 131:44843
- TΙ Integrin receptor antagonists
- IN Duggan, Mark E.; Perkins, James J.; Meissner, Robert S.
- PA Merck & Co., Inc., USA
- SO PCT Int. Appl., 134 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

PI									0624										
		W:							BG,										
									JP,										
			MG,	MK,	MN,	MX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	
			TT,	UA,	US,	UZ,	VN,	YU											
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	
			FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	
									NE,										
	CA	2315	232			A1		1999	0624		CA 1	998-	2315	232		1	9981	214	
	AU	9919	128			A		1999	0705 0920		AU 1	999-	1912	8		1	9981	214	
	AU	7384	52			B2		2001	0920										
									1018		EP 1	998-	9638	93		1	9981	214	
	EP	1044	001			B1		2005	0706										
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	IE,	
					LV,														
	JP	2002	5083	26		T		2002	0319 0715		JP 2	000-	5386	96		1	9981	214	
	AT	2990:	23			T		2005	0715		AT 1	998-	9638	93		1	9981	214	
	ES	2243	015			T3		2005	1116		ES 1	998-	9638	93		1	9981	214	
	US	6211	191			В1		2001	0403		JS 1	998-	2125	10		1	9981	215	<
PRA1	US	6211 1997	-699	09P		P		1997	1217										
	GB	1998	-738	4		A		1998	0406										
	US	1998 1998	-832	50P		P		1998	0427										
	US	1998	-926	30P		P		1998	0713										
	GB	1998	-158	03		A		1998	0721										
	WO	1998	-US2	6485		W		1998	1214										
ASSI	GNME	NT H	ISTO	RY F	OR U	S PA	TENI	AVA	ILABL	E I	N LS	US D	ISPL	AY F	ORMAI	Γ			

OS MARPAT 131:44843

AB The present invention relates to compds, and derivs, thereof, their synthesis, and their use as integrin receptor antagonists.

3(S)-(2,3-dihydrobenzofuran-6-y1)-3-{2-oxo-3-[3-(5,6,7,8-

tetrahydro[1,8]naphthyridin-2-yl)propyl]pyrimidin-1-yl}propionic acid and 3(S)-(3-fluorophenyl)-3-{2-oxo-3(R or

S)-[3-(5,6,7,8-tetrahydro[1,8]naphthyridin-2-y1)propyl]piperidin

-1-yl}propionic acid and 4-[2-(2-aminopyridin-6-yl)ethyl]benzoyl -2(S)-4-iodosulfonylamino-β-alanine were prepared in multistep

processes. More particularly, the compds. of the present invention are antagonists of the integrin receptors $\alpha \nu \beta 3$,

 $\alpha\nu\beta$ 5, and/or $\alpha\nu\beta$ 6 and are useful for

inhibiting bone resorption, treating and preventing osteoporosis, and inhibiting vascular restenosis, diabetic retinopathy, macular

degeneration, angiogenesis, atherosclerosis, inflammation, wound

healing, viral disease, tumor growth, and metastasis.

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

DATE

KIND

L3 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN AN 1990:552791 CAPLUS

DN 113:152791

OREF 113:25983a,25986a

TI Preparation of O-acylfumagillol derivatives as angiogenesis inhibitors IN Kishimoto, Shoji; Fujita, Takeshi

APPLICATION NO

PA Takeda Chemical Industries, Ltd., Japan

SO Eur. Pat. Appl., 49 pp.

CODEN: EPXXDW

PATENT NO

DT Patent

LA English FAN.CNT 3

	PATENT NO.	KIND DATE	APPLICATION NO.	DAIL
PI		A1 19900321 B1 19970326	EP 1989-116052	19890831
	R: AT, BE, CH,	DE, ES, FR, GB,	GR, IT, LI, LU, NL, SE	
	JP 03007270		JP 1989-223063	19890831
	JP 06060168	B 19940810		
	EP 682020	A1 19951115	EP 1995-112110	19890831
	R: AT, BE, CH,	DE, ES, FR, GB,	GR, IT, LI, LU, NL, SE	
	AT 150750	T 19970415	AT 1989-116052	19890831
			ES 1989-116052	
	KR 138530	B1 19980515	KR 1989-12548	19890831
			US 1991-662120	
			US 1991-714436	
	US 5180738			
			US 1992-917842	
	JP 06220034			19931129
	JP 2857575	B2 19990217		
	CA 1340552		CA 1997-617081	19970818
PRAI	JP 1988-219287			
	JP 1989-53537			
	US 1989-391980			
	US 1989-392028			
	EP 1989-116052			
	US 1991-811880	B1 19911219		
os	MARPAT 113:152791			
GT				

Ι

AB The title compds. [I; R1 = CH:CMe2, (un)substituted CH2CHMe2; R2 = substituted alkanoyl, aroyl, (un)substituted heterocyclylcarbonyl, CONH2, alkyl, etc.] were prepared, e.g., by acylation of I (R2 = H). Thus, fumagillol was stirred 20 h with diglycolic anhydride in pyridine to give

I (R1 = COCH2OCH2CO2H, R2 = CH:CMe2) which reduced bovine fibroblast growth factor-induced angiogenesis in cornea of 8 of 8 rats evaluated after 7 days.

THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS) OSC.G 13

ANSWER 26 OF 26 CAPLUS COPYRIGHT 2009 ACS on STN L3

KIND

DATE

1990:552790 CAPLUS AN DN 113:152790

OREF 113:25983a,25986a

TI Preparation of 0-acvlfumagillols and analogs as angiogenesis inhibitors

IN Kishimoto, Shoji; Fujita, Takeshi; Kanamaru, Tsuneo; Folkman, Moses Judah; Ingber, Donald

APPLICATION NO.

EP 1989-116053

CA 1989-610069

AT 1989-116053

ES 1989-116053

KR 1989-12555

US 1991-662120

US 1991-714436

US 1991-717876

US 1992-917827

US 1992-917842

JP 1993-298750

CA 1997-617081

, IT, LI, LU, NL, SE JP 1989-223064

DATE

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19931129

19970818

19910228 <--

19910613 <--

19910613 <--

19920721 <--

19920721 <--

PA Takeda Chemical Industries, Ltd., Japan; Children's Medical Center Corp. SO Eur. Pat. Appl., 50 pp.

CODEN: EPXXDW DT Patent PATENT NO

T.A English FAN.CNT 3

	EA.	LENI NO.		TATIAD	DAIL	
PI	EP	357061		A1	19900307	
	EP	357061		B1	19940608	
		R: AT, B	E, CH,	DE, ES	, FR, GB,	GR
	JP	03007222		A	19910114	
	JP	06060095		В	19940810	
	CA	1329771		С	19940524	
	AT	106726		T	19940615	
	ES	2053890		Т3	19940801	
	KR	141692		B1	19980601	
	US	5166172		A	19921124	
	US	5164410		A	19921117	
	US	5180738		A	19930119	
	US	5290807		A	19940301	
	US	5698586		A	19971216	
	JP	06256331		A	19940913	
	JP	2858724		B2	19990217	
	CA	1340552		С	19990518	
PRAI	JP	1988-21928	7	A	19880901	
	JP	1989-53537		A	19890306	

	UF	00230331	A	12240213
	JP	2858724	B2	19990217
	CA	1340552	C	19990518
PRAI	JP	1988-219287	A	19880901
	JP	1989-53537	A	19890306
	US	1989-391980	A	19890810
	US	1989-392028	B1	19890810
	EP	1989-116053	A	19890831
	US	1991-811800	B1	19911219
	US	1991-811880	B1	19911219

os MARPAT 113:152790 GT

$$\begin{array}{c|c} \bullet & \bullet & \mathsf{CH}_2\mathsf{R}^1 \\ & \mathsf{Me} & \mathsf{OMe} \\ & \mathsf{OR}^2 & \end{array}$$

AB The title compds. [I; R1 = (un)substituted CH:CMe2, CH2CHMe2; R2 = substituted alkanoyl, aroyl, (un) substituted heteroarylcarbonyl, CONH2, alkyl, PhSO2, alkylsulfonyl, H2NSO2, alkoxycarbonyl, PhO2C] were prepared Thus, fumagillol was stirred 2 h at 0° with ClCH2COMCO in CH2Cl2 containing dimethylaminopyridine to give I (R1 = CH:CMe2, R2 = CONHCOCH2Cl) which suppressed B16 mouse melanoma tumor growth to 20% that of controls after 3 wk in mice receiving 30 mg/kg s.c. every other day.

OSC.6 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)